

### Remarks

Claims 1-30 are in the application. Claims 1-3, 6, 9, 11-13, 15-17, 21-22 and 25-29 have been amended. Claims 23 and 24 have been cancelled. Claims 1-30 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-22, 32-33 and 25-30 of co-pending Application No. 10/3888871, respectively. A timely filed terminal disclaimer in compliance with 37 CFR 1.321 (c) is submitted herewith to overcome non-statutory double patenting rejection. No new matter has been added by amendments. Reconsideration of the application as amended is respectfully requested. The Examiner's objections and rejections are addressed in substantially the same order as in the referenced office action.

### CLAIM REJECTIONS UNDER 35 USC § 102

In rejecting claims 1, 6, 11, 16 and 18 are rejected under 35 USC 102 (b) as anticipated by Sinclair (U.S. patent number 6,100,696), the Examiner stated,

Sinclair discloses the same invention (method and instrument) as claimed: An induction instrument comprising: a transmitter 16 for transmitting an electromagnetic signal into a layered formation adjacent a well bore (see Fig. 5); a receiver (18, 20) for receiving a signal from the formation in response to the transmitted electromagnetic signal; and a processor for analyzing the received signal for determining from the received signal polarity indicative of a direction for a boundary between layers in the well bore (col. 6, lines 1-5). Sinclair discloses frequencies of up to 200 Khz (claim 1) and resistivity data (see conductivity data, for example, col. 2, line 4).

MPEP § 2131 provides:

### **TO ANTICIPATE A CLAIM, THE REFERENCE MUST TEACH EVERY ELEMENT OF THE CLAIM**

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir.

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1987). >"When a claim covers several structures or compositions, either generically or as alternatives, the claim is deemed anticipated if any of the structures or compositions within the scope of the claim is known in the prior art." *Brown v. 3M*, 265 F.3d 1349, 1351, 60 USPQ2d 1375, 1376 (Fed. Cir. 2001) (claim to a system for setting a computer clock to an offset time to address the Year 2000 (Y2K) problem, applicable to records with year date data in "at least one of two-digit, three-digit, or four-digit" representations, was held anticipated by a system that offsets year dates in only two-digit formats). See also MPEP § 2131.02.< "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim.

Applicant respectfully submits that *Sinclair* clearly does not teach a quadrupole antenna of amended claims 1,6,11, 16 and 18. Accordingly, *Sinclair* does anticipate claims 1, 6, 11, 16 and 18 as amended of the present invention. *Sinclair* does not teach the *quadrupole antenna* of independent claims 1 and 11 and dependent claims 6, 16 and 18, accordingly, the 102 (b) rejection is unsupported by *Sinclair* and should be withdrawn.

#### **CLAIM REJECTIONS UNDER 35 USC §103**

In rejecting claims 21, 26 and 28 as obvious over *Sinclair*, the Examiner stated,

*Sinclair* discloses substantially the same invention as claimed except for the instruction is contained in a computer readable medium. . . . It would have been obvious to one of ordinary skill in the art at the time of the invention to modify *Sinclair* by embedding the instruction onto a computer readable medium for performing the method steps discussed in the previous 102 paragraphs.

Applicant respectfully traverses the Examiner's rejection of claims 21, 26, 23 and 28 as follows:

The Examiner has failed to establish a *prima facie* case of obviousness.

MPEP § 2143.01 provides,

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references

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themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

Applicant respectfully submits that the Examiner has not established a prima facie case of obviousness under 35 USC § 103 because the reference cited does NOT teach or suggest all of the elements of the claims.

As discussed above, *Sinclair* does not disclose the quadrupole antenna of claims 21, 26 and 28 claimed invention. Thus, the Examiner has failed to establish a prima facie case of obviousness under 35 § USC 103. Accordingly, the references cited by the Examiner do not teach or suggest all of the elements (i.e. the quadrupole antenna) of claims 21, 26 and 28 as discussed above.

Accordingly, the references cited by the Examiner do not teach or suggest all of the elements of amended claims 21, 26 and 28 as discussed above. For the reasons discussed above, Applicant respectfully submits that claims 21, 26 and 28, are patentable under 35 USC § 103 over *Sinclair*.

### CONCLUSION

For the reasons discussed above, it is believed the claims 1-22 and 25- 30 are patentable over *Sinclair*. Applicant requests these claims be allowed.

Reconsideration of the application as amended is respectfully requested. The Commissioner is authorized to charge any fees deemed necessary or credit any 414-28764-USC ROA 1

overpayment related to the filing of this Response and including the terminal disclaimer fee, to Deposit Account No. 02-0429 (414-28764-USC) maintained by Baker Hughes Incorporated.

In the event that an extension of time is required, or may be required in addition to that requested in a petition for an extension of time, the Commissioner is requested to grant a petition for that extension of time which is required to make this response timely and is hereby authorized to charge any fee for such an extension of time or credit any over payment for an extension of time to Deposit Account No. 02-0429 (414-28764-USC) maintained by Baker Hughes Incorporated.

Respectfully submitted,

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Date



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